02-2205

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TRANSMITTAL **FORM**

e used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/067,556
Filing Date	February 4, 2002
First Named Inventor	Ravi Narasimhan
Art Unit	To Be Assigned
Examiner Name	To Be Assigned
Attorney Docket Number	MP0091

		![<u></u>	
		ENCLOSU	RES (check all that apply)		
Fee Transmittal F	Form	Drawing(s)			ter Allowance Communication to echnology Center (TC)
Fee Attached	i	Licensing-r	related Papers		ppeal Communication to Board of opeals and Interferences
Amendment / Re	ply	☐ Petition			ppeal Communication to TC ppeal Notice, Brief, Reply Brief)
After Final			Convert to a Application		oprietary Information
Affidavits/dec	claration(s)		ttorney, Revocation Correspondence Address	☐ Sta	atus Letter
Extension of Time	e Request	Terminal D	isclaimer	⊠ o	ther Enclosure(s) ease identify below):
Express Abandonment Request		Request for Refund CD, Number of CD(s)		PTO Form 1449 with one cited reference; and Return Postcard.	
Information Discl	osure Statement				
Certified Copy of Priority Document(s)		Remarks The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.			
Response to Miss Incomplete Applic		•	ACCOUNT NO. 08-0750.	A auplic	cate copy of this sheet is enclosed.
Response to Parts under 3 1.52 or 1.53			,		
	SIGNA	TURE OF APP	LICANT, ATTORNEY, O	R AGEN	NT
Firm or Harness, Dickey & Individual name			Attorney Name Michael D. Wiggins		Reg. No. 34,754
Signature	Mulel	DNusx	`		
Date	February 21, 2005	00			4
	C	ERTIFICATE C	OF TRANSMISSION/MAIL	ING	

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Stephanie Stevens	Express Mail Label No.	EV 570 162 896 US (2/21/2005)
Signature	Sliphys Stra	Date	February 21, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

bolication No.:

10/067,556

Ming Date:

February 4, 2002

Applicant:

EB 2 1 2005

Ravi Narasimhan

Group Art Unit:

To Be Assigned

Examiner:

To Be Assigned

Title:

METHOD AND APPARATUS FOR ESTIMATION OF

ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING

SYMBOL TIMING AND CARRIER OFFSET

Attorney Docket:

MP0091

Director of the United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. <u>LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION</u>

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

II. COPIES

A. Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated

	be listed. B. Any patents, publications or other information 1449 or on the copies of PTO-892, but which previously cited by or submitted to the PTO in which has been relied upon for an earlier filing d	mation which are listed on Form are not enclosed herewith, were one of the following applications
	U.S. Serial Number	U.S. Filing Date
	C. This is a PCT application in the entry of States. A copy of the International Search Repinformation. The documents listed on the Internation on the attached Form 1449 for consideration by any patent resulting from this application. If the from the US, EPO, or JPO search authorities, of have been supplied to the USPTO under the believed to be in the file of the above-identified as	ort is attached for the Examiner's rnational Search report are listed y the Examiner and for listing on a International Search report was copies of these references should be trilateral agreement and are
III.	CONCISE EXPLANATION OF THE RELEVANO	CE (check at least one box)
	A. X Except as may be indicated below in (B), other information are in the English language (co	all of the patents, publications or oncise explanation not required).
	B. A concise explanation of the relevance of information listed that is not in the English langues § 1.98(a)(3)):	f each patent, publication or other uage is as follows (see 37 C.F.R.
	1. See the attached foreign patent counterpart foreign application:	t office communication from a
	2. English translations are provided:	
	3. Other:	
	C. The following additional information i consideration.	s provided for the Examiner's

V.	CROSS REFERENCE	TO RELATED APPLICA	ATION(S)
	contain(s) subject ma bringing this(these) ap	itter that may be related	llowing co-pending application(sd to the present application. By iner's attention, Applicant(s) does U.S.C. § 122.
	Serial No.	Filing Date	Art Unit
٧.	THIS IDS IS BEING F	ILED UNDER	
	A. 🛭 37 C.F.R. § 1.97	(b): (check <u>only</u> one box)
	than a continu	ee months of the filing da ed prosecution application fee or certification is requ	ate of a national application othe on under § 1.53(d) (37 C.F.R. § uired.
	2. within thre forth in § 1.491 fee or certificati	in an international applic	entry of the national stage as se ation (37 C.F.R. § 1.97(b)(2)). No
	1.97(b)(3)). No Office Action o under 37 C.F.F 1.97(e) below;	ofee or certification is ron on the merits has been R. § 1.97(c) and see the or, if no certification has	Action on the merits (37 C.F.R. § equired. In the event that a firs issued, please consider this IDS e certification under 37 C.F.R. § been made, charge our deposits required by 37 C.F.R. § 1.17(p
	4. Defore the for continued exist required.	e mailing of a first Office xamination under 37 C.F.	Action after the filing of a reques R. § 1.114. No fee or certification
	B. 37 C.F.R. § 1.97	'(c): (check <u>only</u> one box)	
	before the maili 1.113, a Notice otherwise close	of Allowance under 37	al Office Action under 37 C.F.R. § C.F.R. § 1.311, or an action tha
	1. No certific by 37 C.F.R. §	eation; therefore, a fee in 1.17(p).	the amount of \$180.00 is required
	2 Coothoo	ortification balance. No fee	in manufacid

	C. 37 C.F.R. § 1.97(d):
	after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.
	1. See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
VI.	CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)
	The undersigned hereby certifies that:
	A. each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or
	B. no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).
	C. some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.
VII.	STATEMENT UNDER 37 C.F.R. 1.704(d)
	The undersigned hereby states that:
	each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

VIII. PAYMENT OF FEES (check only one box)

- A. A check in the amount of \$180.00 is enclosed for the above identified fee.
- B. Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

Dated: 2 21 05

Michael D. Wiggin Reg. No. 34,754

Harness, Dickey & Pierce, P.L.C. P.O. Box 828 Bloomfield Hills, Michigan 48303 (248) 641-1600

FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE PAGE AMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 1

ATTORNEY DOCKET No.	SERIAL NO.
MP0091 10/067,556	
APPLICANT	
Ravi Narasimhan	
FILING DATE	GROUP
February 4, 2002 To Be Assigned	

U.S. P	U.S. PATENT DOCUMENTS					
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.						

FORE	IGN PATEN	T DOCUMENTS					
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.		CA 2,064,975	09/28/2003	Canada			

OTHE	R DOCUME	NTS (including Author, Title, Date, Pertinent Pages, etc.)
Ref. Desig.	Examiner's Initials	
1.		

Examiner:	Date Considered: